

REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks.

Claims 1-29 are pending in the application, with claims 1, 10, 20, and 29 being independent. Claims 1-10, 12-13, 20, 23-27 and 29 are amended herein. Support for the claim amendments and additions can be found in the original disclosure. No new matter has been added.

INFORMATION DISCLOSURE STATEMENT

The IDS filed on August 6, 2007 is submitted herewith with the publishers identified.

DRAWING OBJECTIONS

The Office objected to the drawings due to a defect in Fig. 2 in the numbering of element 228. This objection appears on the PTOL-326 mailed 10/31/07 and on page 3 of the 10/31/07 office action. However, a corrected replacement sheet was previously sent to the Office and received on August 6, 2007. On page 2 of the 10/31/07 office action, item 4, the Office states "The objection to the drawings is withdrawn in view of Applicant's amendments to the drawings."

Applicant believes the objection has been satisfied, but Applicant submits copy of this replacement sheet herewith. Accordingly, Applicant requests withdrawal of the drawing objections.

CLAIM OBJECTIONS

Claims 4, 5, 10-19, and 23-27 stand objected to because of informalities. Claims 4, 5, 10-19 and 23-27 are amended herein to address the informalities noted in the Office Action. Accordingly, Applicant requests withdrawal of the claim objections.

§ 112 SECOND PARAGRAPH REJECTIONS

Claim 9 stands rejected under 35 U.S.C. § 112, as allegedly being indefinite. Without conceding the propriety of the rejection and in the interest of expediting allowance of the application, claim 9 has been amended as suggested by the examiner and is believed to be allowable.

§ 102 REJECTIONS

Claims 1-5, 8-13, 19-24, and 27-29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,725,279 (“Richter”). Applicant respectfully traverses the rejection.

Nevertheless, without conceding the propriety of the rejection and in the interest of expediting allowance of the application, claim 1 has been amended as proposed during the interview and is believed to be allowable.

Independent claim 1 as currently amended recites:

A method to support and dynamically manage media pipeline topology changes during media application sessions to facilitate presentation of media during dynamic changes comprising:

receiving a partial media pipeline topology that defines how data flows through a plurality of nodes in the media pipeline including at least a first media source node and at least a first media sink node;

retrieving a cached media pipeline topology when the partial media pipeline topology is not sufficient to permit presentation to further define how data flows through a plurality of nodes in the pipeline including at least a second media source node, at least a second media sink node, and at least one transform node; and

copying one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during the media application session thus creating a full media pipeline topology to facilitate seamless presentation of media.

Richter is directed to multimedia processing system architecture and discloses a system to “manage multimedia data transfers across a plurality of different buses and communications protocols.” (Richter, column 2, lines 6-9.) Richter appears to disclose a modular system where an application interface is used to select various processing blocks to affect a multimedia stream. When the exchange between input and output is impossible, the application interface modifies the selection of the processing blocks. (Richter, column 2, lines 50-54.) Richter does not appear to teach a way to handle the change in processing blocks without disrupting the media stream. More particularly, Richter fails to disclose or suggest “support[ing] and dynamically manag[ing] media pipeline topology changes during media application sessions to facilitate presentation of media during dynamic changes comprising” as presently recited in independent claim 1. Richter does not appear to maintain a cache of previously used processing blocks, which may have state information from the prior use. Moreover, Richter fails to disclose or suggest “retrieving a cached media pipeline topology when the partial media pipeline topology is not sufficient to permit presentation” or “copying one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during the media application session thus creating a full media pipeline

topology to facilitate seamless presentation of media.” Accordingly, claim 1 is allowable.

Dependent claims 2-5 and 8-9 depend from independent claim 1 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim, particularly with regards to the following specific arguments for selected claims.

Regarding claims 2-3, Richter discloses “two blocks can communicate via the TDM bus using the G711 u-law format.” The G.711 u-law format is known to be a companding algorithm, primarily used in telephony applications, to reduce the dynamic range of an audio signal. This is consistent with the description of the invention in Richter as relating to a unified messaging system (i.e. telephone, voicemail, etc.) (Richter, column 1, lines 6-59) where that the communication taking place is the transfer of the actual signal to be processed (for example, a compandored audio stream), and not an interface call nor data relating to the sequencing or status of the processing blocks. “[A] parameter in an interface call” as presently recited in claims 2 and 3 is not equivalent to the communication “using the G711 u-law format” disclosed by Richter because the former relates to the control of the processing while the other relates to the transfer of data to be processed.

Regarding claim 4, Richter discloses “the application interface examines the connecting ports.” Because Richter fails to cache processing blocks, it has no need to, and therefore does not disclose, “determining whether there are corresponding nodes in the partial media topology and the cached media pipeline topology” as presently recited in claim 4.

Independent claim 10 is also rejected under § 102(e) as being anticipated by U.S. Patent No. 6,725,279 (“Richter”). **Claim 10**, as currently amended, recites:

A system comprising:
one or more computer-readable storage media; and
a media engine embodied on the one or more computer-readable media and configured to communicatively interact with an application to present a media presentation;
the media engine being configured to use:
a media session to generate a partial topology, the partial topology including one or more media sources, individual ones of which serve as a source of media content, and one or more media sinks configured to sink a media stream; and
a topology loader to resolve the partial topology into a full media topology, wherein the topology loader is configured to copy one or more nodes including state information from a cached media topology to resolve the full media topology, and the topologies define a flow of data through the nodes.

Richter is directed to multimedia processing system architecture and discloses a system to “manage multimedia data transfers across a plurality of different buses and communications protocols.” (Richter, column 2, lines 6-9.) Richter does not appear to maintain a cache of previously used processing blocks which may have state information from the prior use. Moreover, Richter fails to disclose or suggest “a topology loader to resolve the partial topology into a full media topology, wherein the topology loader is configured to copy one or more nodes including state information from a cached media topology to resolve the full media topology, and the topologies define a flow of data through the nodes” as presently recited in independent claim 10.

Accordingly, claim 10 is allowable.

Dependent claims 11-13, and 19 depend from independent claim 10 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim, particularly with regards to the following specific arguments for selected claims.

Regarding claims 11 and 12, similar to claims 2 and 3 discussed above, “a parameter in an interface call” as presently recited in claims 11 and 12 is not equivalent to the communication “using the G711 u-law format” disclosed by Richter because the former relates to the control of the processing while the other relates to the transfer of data to be processed.

Regarding claim 13, Richter discloses “the application interface examines the connecting ports of output interface IS1 of block 1 and those of the input interface of block B2.” (Richter, column 3, lines 26-29.) Examining the input and output blocks of an existing topology in Richter is done to “determine whether or not a multimedia flow may be created between block B1 and block B2.” (Id.) In other words, Richter appears to be checking to see if the flow will work, as opposed to comparing components. Thus, Richter’s action of examining is not the same as “determin[ing] whether there are corresponding nodes in the partial topology and the cached media topology,” as presently recited in claim 13.

Independent claim 20 is also rejected under § 102(e) as being anticipated by U.S. Patent No. 6,725,279 (“Richter”). Claim 20, as currently amended, recites:

One or more computer-readable storage media comprising computer executable instructions that, when executed on a computer, direct the computer to:
receive a partial media topology defined by the flow of data through various components that includes a plurality

of nodes including at least a first media source node and at least a first media sink node;

retrieve a cached media topology that includes a plurality of nodes including at least a second media source node, at least a second media sink node, and at least one transform node; and

copy one or more nodes including state information from the cached media topology to a fully resolved media topology.

Richter is directed to multimedia processing system architecture and discloses a system to “manage multimedia data transfers across a plurality of different buses and communications protocols.” (Richter, column 2, lines 6-9.) For reasons similar to those described in claim 1, Richter fails to disclose or suggest “copy one or more nodes including state information from the cached media topology to a fully resolved media topology” as presently recited in independent claim 20.

Accordingly, claim 20 is allowable.

Dependent claims 21-24 and 27-28 depend from independent claim 20 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim, particularly with regards to the following specific arguments for selected claims.

Regarding claims 21 and 22, similar to claims 2 and 3, “a parameter in an interface call” as presently recited in claims 21 and 22 is not equivalent to the communication “using the G711 u-law format” disclosed by Richter because the former relates to the control of the processing while the other relates to the transfer of data to be processed.

Regarding claim 23, similar to claim 13 discussed above, Richter's action of examining is not the same as "determin[ing] whether there are corresponding nodes in the partial media topology and the cached media topology," as presently recited in claim 23.

Independent claim 29 is also rejected under § 102(e) as being anticipated by U.S. Patent No. 6,725,279 ("Richter"). **Claim 29**, as presented, recites:

A topology loader module comprising computer executable instructions stored in computer-readable storage media that, when executed by a computer, provide:

means for receiving a partial media topology that defines how data flows through a plurality of nodes including at least a first media source node and at least a first media sink node;

means for retrieving a cached media topology that defines how data flows through a plurality of nodes including at least a second media source node, at least a second media sink node, and at least one transform node; and

means for copying one or more nodes including state information from the cached media topology to a fully resolved media topology.

Richter is directed to multimedia processing system architecture and discloses a system to "manage multimedia data transfers across a plurality of different buses and communications protocols." (Richter, column 2, lines 6-9.) Richter does not appear to maintain a cache of previously used processing blocks which may have state information from the prior use. Moreover, Richter fails to disclose or suggest "means for copying one or more nodes including state information from the cached media topology to a fully resolved media topology" as presently recited in independent claim 29.

Accordingly, claim 29 is allowable.

§ 103 REJECTIONS

Claims 6, 14-16, and 25 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,725,279 (“Richter”) in view of U.S. Patent No. 6,549,932 (“McNally”). Applicant respectfully traverses the rejection.

Claims 7, 17, 18, and 26 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,725,279 (“Richter”). Applicant respectfully traverses the rejection.

Nevertheless, without conceding the propriety of the rejection and in the interest of expediting allowance of the application, claims 1-10, 12-13, 20, and 23-27 have been amended as proposed during the interview and are believed to be allowable.

Richter et al. in view of McNally et al.

Claims 6, 14-16, and 25 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,725,279 (Richter et al.) in view of U.S. Patent No. 6, 549,932 (McNally et al.). Applicant respectfully traverses the rejection.

As described above, Richter fails to teach or disclose all of the elements in claim 1. McNally fails to remedy these deficiencies. McNally discloses a system for discovery in a distributed computing environment. (McNally, Abstract.) McNally uses the term “nodes” to refer to separate computers (Fig. 1, McNally) not components of a media pipeline topology. McNally involves a “distributed computer network environment to discover particular machines or resources.” (McNally, column 2, lines 35-39.) McNally appears to use the term “clone” in the context of “deploy[ing] a self-routing software agent into a distributed computer network to discover workstations that satisfy a given

criteria. During a particular search, a given agent may "clone" itself at a particular node to continue the search along a new network path." (McNally, column 2, lines 63-67) McNally fails to disclose "a cached media pipeline topology," "copying one or more nodes including state information from the cached media pipeline topology to the partial media pipeline topology during the media application session thus creating a full media pipeline topology to facilitate seamless presentation of media," or "dynamically manag[ing] media pipeline topology changes during media application sessions," which are presently recited in claim 1.

Dependent claim 6 depends from independent claim 1 and is allowable by virtue of this dependency, as well as for additional features that it recites, including the following.

McNally appears to clone an entire agent to a new computer node to facilitate the discovery process, not a node within a media pipeline topology. (McNally, column 11, lines 46-53.) McNally fails to remedy the deficiencies of Richter and teach "cloning a plurality of connected nodes from the cached media topology into the partial media topology" as presently recited in claim 6.

Dependent claims 14-16 depend from independent claim 10 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim, particularly with regards to the following specific arguments for selected claims.

Regarding claim 14, as described above, Richter fails to teach or disclose all of the elements in claim 10. McNally fails to remedy these deficiencies. McNally discloses

a system for discovery in a distributed computing environment. (McNally, Abstract.) McNally uses the term “nodes” to refer to separate computers (Fig. 1, McNally) not components of a media pipeline topology. McNally involves a “distributed computer network environment to discover particular machines or resources.” (McNally, column 2, lines 35-39.) McNally appears to use the term “clone” in the context of “deploy[ing] a self-routing software agent into a distributed computer network to discover workstations that satisfy a given criteria, not nodes in a media pipeline topology. During a particular search, a given agent may “clone” itself at a particular node to continue the search along a new network path.” (McNally, col. 2: 63-67) McNally fails to teach or disclose “topology loader is configured to clone one or more intermediate nodes from the cached media topology,” as presently recited in claim 14.

Dependent claim 25 depends from independent claim 20 and is allowable by virtue of this dependency, as well as for additional features that they recite. Similar to claim 14 above, McNally clones an entire software agent capable of operation, not a node in a media pipeline topology. Applicant also respectfully requests individual consideration of this dependent claim.

In view of Richter et al.

Claims 7, 17, 18, and 26 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,725,279 (Richter et al.) Applicant respectfully traverses the rejection.

Dependent claim 7 depends from independent claim 1 and is allowable by virtue of this dependency, as well as for additional features that it recites. Applicant also respectfully requests individual consideration of this dependent claim.

Dependent claims 17-18 depend from independent claim 10 and are allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

Dependent claim 26 depends from independent claim 20 and is allowable by virtue of this dependency, as well as for additional features that they recite. Applicant also respectfully requests individual consideration of each dependent claim.

CONCLUSION

For at least the foregoing reasons, claims 1-29 are in condition for allowance. Applicant respectfully requests reconsideration and withdrawal of the rejections and an early notice of allowance.

If any issue remains unresolved that would prevent allowance of this case,
Applicant requests that the Examiner contact the undersigned to resolve the issue.

Respectfully submitted,

Date: 1/28/08

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